

Table 1

Strain No.	Strains Genus	Supernatant fraction ($\mu\text{g/L}$ of culture solution)		Cell fraction	
		FOH	GGOH	FOH	GGOH
ATCC 12341	<i>Saccharomyces cerevisiae</i>	0.0	0.0	0.0	14.4
K 4010	<i>Saccharomyces</i> sp.	0.0	0.0	0.0	9.1
K 4031	<i>Saccharomyces</i> sp.	0.0	0.0	0.0	7.0
K 4037	<i>Saccharomyces</i> sp.	0.0	0.0	0.0	5.8
K 4039	<i>Saccharomyces</i> sp.	0.0	0.0	0.0	5.5
K 4041	<i>Saccharomyces</i> sp.	0.0	0.0	0.0	8.4
IFO 0565	<i>Saccharomyces cerevisiae</i>	0.0	0.0	0.0	54.7
IFO 0222	<i>Saccharomyces cerevisiae</i>	0.0	0.0	0.0	3.3
IFO 0216	<i>Saccharomyces cerevisiae</i>	0.0	0.0	0.0	5.8
ATCC 9080	<i>Saccharomyces cerevisiae</i>	0.0	0.0	0.0	5.7
IFO 0106	<i>Saccharomycopsis fibuligera</i>	0.0	0.0	0.0	3.4
IFO 0125	<i>Williopsis saturnus</i> var. <i>saturuns</i>	0.0	0.0	0.0	5.4
IFO 0807	<i>Pichia silvicola</i>	0.0	0.0	0.0	1.2
IFO 0980	<i>Nakazawaea holstii</i>	0.0	0.0	0.0	5.2
K 4327	<i>Hansenula polymopla</i>	0.0	0.0	0.0	4.7
IFO 0151	<i>Kloeckera japonica</i>	0.0	0.0	0.0	10.2
IFO 0128	<i>Pichia membranaefaciens</i>	0.0	0.0	0.0	11.0
K 4261	<i>Pichia aganobii</i>	0.0	4.0	0.0	0.0
IFO 0941	<i>Williopsis saturnus</i> var. <i>saturuns</i>	0.0	0.0	0.0	6.7
IFO 0013	<i>Candida krusei</i>	0.0	0.0	0.0	16.5
IFO 0706	<i>Candida kefir</i>	0.0	0.0	0.0	4.9
IFO 0716	<i>Candida tenuis</i>	0.0	0.0	0.0	8.7
IFO 0617	<i>Kluyveromyces marxianus</i>	0.0	0.0	0.0	25.2
IFO 0762	<i>Candida solani</i>	0.0	0.0	0.0	29.0
IFO 1060	<i>Candida albicans</i>	0.0	2.4	0.0	0.0
IFO 0720	<i>Candida catenulata</i>	0.0	0.0	0.0	25.9

K: strain maintained by Kyoto University

FOH: farnesol

GGOH: geranylgeraniol

Table 2

Strain No.	Strains	Genus	Supernatant fraction ($\mu\text{g/L}$ of culture solution)		Cell fraction	
			FOH	GGOH	FOH	GGOH
K 4002	Saccharomyces	sp.	4.4	0.0	0.0	10.9
K 4006	Saccharomyces	sp.	4.2	0.0	4.3	6.7
K 4013	Saccharomyces	sake	0.0	0.0	7.3	5.0
K 4015	Saccharomyces	sake	7.9	0.0	6.6	7.9
K 4016	Saccharomyces	sake	4.5	0.0	2.2	6.5
K 4017	Saccharomyces	sake	4.3	0.0	7.9	7.9
K 4018	Saccharomyces	sake	4.4	0.0	5.0	9.9
K 4020	Saccharomyces	sake	0.0	0.0	2.8	5.4
K 4022	Saccharomyces	sake	0.0	0.0	2.1	4.7
K 4023	Saccharomyces	sake	0.0	0.0	5.2	11.5
K 4025	Saccharomyces	sake	5.0	0.0	5.5	2.0
K 4026	Saccharomyces	sake	0.0	0.0	2.6	7.6
K 4029	Saccharomyces	sake	0.0	0.0	2.2	2.3
K 4030	Saccharomyces	sp.	5.1	0.0	4.6	3.7
K 4036	Saccharomyces	sp.	0.0	0.0	4.1	15.2
K 4045	Saccharomyces	cerevisiae	0.0	0.0	44.9	18.6
K 4102	Saccharomyces	ellipsoideus	0.0	0.0	22.9	7.2
K 4103	Saccharomyces	cerevisiae	0.0	0.0	22.6	8.6
K 4104	Saccharomyces	cerevisiae	0.0	0.0	15.8	31.7
IFO 0252	Saccharomyces	rosei	0.0	0.0	28.5	39.0
IFO 0288	Kluyveromyces	marxianus	0.0	0.0	11.3	22.6
Kyokai No. 2	Saccharomyces	sake	0.0	0.0	9.7	26.1
IFO 0422	Torulaspora	delbrueckii	0.0	0.0	8.2	11.9
IFO 0487	Zygosaccharomyces	rouxii	0.0	0.0	4.9	14.3
IFO 1346	Saccharomyces	cerevisiae	0.0	0.0	4.3	13.1
ATCC 204660	Saccharomyces	cerevisiae	8.7	0.0	9.3	26.8
IFO 0339	Saccharomycodes	ludwigii	15.3	0.0	6.0	80.9
IAM 4842	Schizosaccharomyces	octosporus	2.7	0.0	2.2	12.1
IFO 1116	Wickerhamia	fluorescens	18.7	0.0	4.2	23.0
IFO 0794	Debaryomyces	hansenii	4.8	2.7	7.7	11.5
		var. fabryi				
IFO 1359	Debaryomyces	castellii	18.5	0.0	6.3	21.1

(Continuation of Table 2)

ICM 2169	Debaryomyces vanrijiae var vanrijiae	73.7	0.0	14.3	6.2
IFO 0115	Hanseniaspora valbyensis	13.6	0.0	7.4	103.5
IFO 0118	Pichia anomala	0.0	0.0	2.2	15.3
IFO 0569	Pichia anomala	0.0	0.0	7.3	28.2
IFO 0941	Williopsis saturnus var. saturnus	4.7	0.0	69.8	78.7
IFO 1475	Ogataea polymorpha	0.0	0.0	13.5	36.1
IFO 1670	Pichia naganishii	1.2	2.1	0.0	0.0
IFO 0707	Pichia anomala	8.6	0.6	0.0	12.3
IFO 0719	Candida zeylanoides	10.2	0.0	4.4	20.3
IFO 0701	Candida stellata	10.3	0.0	0.0	4.9
IFO 0662	Kluyveromyces thermotolerans	13.7	0.0	10.4	9.2
IFO 0648	Kluyveromyces lactis	16.0	0.0	6.3	72.9
IFO 0005	Candida glabrata	35.7	5.4	4.5	28.3
IFO 0595	Zygosaccharomyces japonicus	9.3	3.6	0.0	0.0

K: strain maintained by Kyoto University

FOH: farnesol

GGOH: geranylgeraniol

Table 3

Strain No.	Strains Genus	Supernatant fraction ($\mu\text{g/L}$ of culture solution)		Cell fraction ($\mu\text{g/L}$ of culture solution)	
		FOH	GGOH	FOH	GGOH
K 4003	Saccharomyces sp.	5.0	0.0	19.3	0.0
K 4004	Saccharomyces sp.	10.6	0.0	15.2	0.0
K 4011	Saccharomyces sake	0.0	0.0	9.0	0.0
K 4021	Saccharomyces sake	0.0	0.0	2.2	0.0
K 4101	Saccharomyces logos	0.0	0.0	18.4	0.0
IFO 0686	Zygosaccharomyces rouxii	0.0	0.0	10.1	0.0
IFO 0285	Saccharomyces dairensis	4.4	0.0	0.0	0.0
IFO 0262	Saccharomyces cerevisiae	7.1	0.0	0.0	0.0
IFO 0021	Zygosaccharomyces fermentati	5.4	0.0	0.0	0.0
IFO 0259	Saccharomyces paradoxus	3.2	0.0	0.0	0.0
IFO 0539	Saccharomyces bayanus	1.4	0.0	0.0	0.0
IFO 0613	Saccharomyces bayanus	2.3	0.0	0.0	0.0
IFO 0346	Schizosaccharomyces pombe	4.4	0.0	16.8	0.0
IFO 0358	Schizosaccharomyces pombe	2.3	0.0	4.7	0.0
IFO 0023	Debaryomyces hansenii	12.2	0.0	0.0	0.0
IFO 0954	Citeromyces matritensis	8.5	0.0	0.0	0.0
IFO 0974	Kuraishia capsulata	0.0	0.0	8.2	0.0
IFO 0963	Pichia anomala	0.0	0.0	9.6	0.0
IFO 0673	Waltomyces lipofer	10.1	0.0	0.0	0.0
IFO 0678	Lypomyces starkeyi	4.8	0.0	0.0	0.0
IFO 0579	Candida albicans	12.8	0.0	0.0	0.0
IFO 0626	Candida utilis	3.0	0.0	0.0	0.0
IFO 3022	Bacillus amyloliquefaciens	4.1	0.0	0.0	0.0
IFO 3030	Bacillus pumilus	6.0	0.0	0.0	0.0
IFO 3762	Staphylococcus epidermidis	6.1	0.0	0.0	0.0
K 876	Pseudomonas sp.	18.6	0.0	0.0	0.0

K: strain maintained by Kyoto University

FOH: farnesol

GGOH: geranylgeraniol

Table 4

Strain No.	Genus	Supernatant fraction ($\mu\text{g/L}$ of culture solution)			Cell fraction		
		NE	FOH	GGOH	NE	FOH	GGOH
IFO 12865	<i>Streptomyces gardneri</i>	0.0	0.0	0.0	11.5	0.0	0.0
IFO 3384	<i>Nocardia asteroides</i>	0.0	0.0	0.0	14.2	0.0	0.0
IFO 14340	<i>Nocardia fusca</i>	0.0	0.0	0.0	6.4	0.0	0.0

NE: nerolidol

FOH: farnesol

GGOH: geranylgeraniol

Table 5

		Supernatant fraction (μg/L of culture solution)				
		Phosphatase-untreated			Phosphatase-treated	
Strain No.	Medium composition	Cultivation period (days)	FOH	GGOH	FOH	GGOH
IFO 0005	YM	1	0.0	0.0	1.5	0.0
		2	0.0	0.0	0.0	0.0
		3	0.0	0.0	0.0	0.0
	YM+Glc	1	0.0	0.0	6.1	0.0
		2	0.0	0.0	9.5	0.0
		3	29.4	2.3	13.9	0.0
	YM+Glc+SBO	1	0.0	0.0	0.0	0.0
		2	135.6	92.0	69.9	31.5
		3	850.7	416.5	116.6	40.0
IFO 0115	YM	1	0.0	0.0	0.0	0.0
		2	0.0	0.0	0.0	0.0
		3	34.0	0.0	0.0	0.0
	YM+Glc	1	0.0	0.0	0.0	0.0
		2	11.3	0.0	0.0	0.0
		3	36.4	0.0	18.0	0.0
	YM+Glc+SBO	1	0.0	0.0	0.0	0.0
		2	24.0	0.0	5.1	0.0
		3	30.3	26.5	7.9	0.0
IFO 0339	YM	1	0.0	0.0	0.0	0.0
		2	8.7	0.0	0.0	0.0
		3	0.0	0.0	0.0	0.0
	YM+Glc	1	0.0	0.0	0.0	0.0
		2	16.8	0.0	17.7	0.0
		3	67.1	0.0	20.8	0.0
	YM+Glc+SBO	1	0.0	0.0	0.0	0.0
		2	11.7	5.3	0.0	0.0
		3	85.6	7.3	6.5	0.0

FOH: farnesol

GGOH: geranylgeraniol

YM: YM medium (Difco)

YM+Glc: YM medium (Difco) + 5% glucose

YM+Glc+SBO: YM medium (Difco) + 5% glucose + 1% soybean oil

Table 6

		Cell fraction (μg/L of culture solution)				
		Phosphatase-untreated		Phosphatase-treated		
Strain No.	Medium composition	Cultivation period (days)	FOH	GGOH	FOH	GGOH
IFO 0005	YM	1	39.4	0.0	0.0	0.0
		2	14.8	37.3	0.0	0.0
		3	11.4	41.7	51.2	0.0
	YM+Glc	1	8.4	0.0	0.0	0.0
		2	44.1	134.4	86.8	304.8
		3	104.4	323.9	202.4	772.6
	YM+Glc+SBO	1	5.8	0.0	0.0	0.0
		2	427.4	178.9	248.0	239.6
		3	835.3	363.7	1321.6	1176.2
IFO 0115	YM	1	0.0	0.0	0.0	0.0
		2	34.0	5.1	0.0	0.0
		3	21.1	45.6	0.0	63.7
	YM+Glc	1	0.0	0.0	0.0	0.0
		2	46.6	26.1	23.9	0.0
		3	54.2	108.5	78.0	491.8
	YM+Glc+SBO	1	0.0	0.0	0.0	0.0
		2	0.0	0.0	9.7	0.0
		3	61.3	122.0	69.2	286.1
IFO 0339	YM	1	18.0	0.0	0.0	0.0
		2	16.6	0.0	0.0	0.0
		3	19.5	48.3	0.0	71.0
	YM+Glc	1	0.0	0.0	0.0	0.0
		2	58.6	34.1	12.0	0.0
		3	62.3	173.8	67.8	464.8
	YM+Glc+SBO	1	0.0	0.0	0.0	0.0
		2	96.4	10.3	9.3	0.0
		3	61.6	103.7	27.9	135.6

FOH: farnesol

GGOH: geranylgeraniol

YM: YM medium (Difco)

YM+Glc: YM medium (Difco) + 5% glucose

YM+Glc+SBO: YM medium (Difco) + 5% glucose + 1% soybean oil

Table 7

Medium composition: YM medium (Difco)

Strain No.	Strains	Supernatant fraction ($\mu\text{g/L}$ of culture solution)		Cell fraction	
		FOH	GGOH	FOH	GGOH
K 4104	<i>Saccharomyces cerevisiae</i>	0.0	0.0	15.8	31.7
IFO 0252	<i>Saccharomyces rosei</i>	0.0	0.0	28.5	39.0
IFO 0565	<i>Saccharomyces cerevisiae</i>	0.0	0.0	0.0	54.7
IFO 0941	<i>Williopsis saturnus</i> var. <i>saturnus</i>	4.7	0.0	69.8	78.7
IFO 1475	<i>Ogataea polymorpha</i>	0.0	0.0	13.5	36.1
IFO 0648	<i>Kluyveromyces fragilis</i>	6.0	0.0	6.3	72.9

K: strain maintained by Kyoto University

FOH: farnesol

GGOH: geranylgeraniol

Table 8

Medium composition: YM medium (Difco) + 5% glucose + 1% soybean oil

Strain No.	Strains	Cultivation days	Supernatant fraction (µg/L of culture solution)				Cell fraction	
			FOH	GGOH	FOH	GGOH	FOH	GGOH
K 4104	<i>Saccharomyces cerevisiae</i>	3	281.0	127.7	241.1	161.6		
		6	338.2	186.9	155.3	132.2		
IF0 2052	<i>Saccharomyces rosei</i>	3	220.0	98.0	305.9	140.2		
		6	381.2	176.6	193.1	122.5		
IF0 0565	<i>Saccharomyces cerevisiae</i>	3	49.3	16.0	88.0	78.2		
		6	51.9	34.1	248.5	214.2		
IF0 0941	<i>Williopsis saturnus</i>	3	54.8	22.6	255.3	169.3		
	var. <i>saturnus</i>	6	88.3	33.1	363.2	220.9		
IF0 1475	<i>Ogataea polymorpha</i>	3	60.9	69.1	113.5	127.2		
		6	19.8	14.4	60.8	95.9		
IF0 0648	<i>Kluyveromyces fragilis</i>	3	28.5	37.8	61.8	91.1		
		6	120.3	124.5	159.8	211.5		

K: strain maintained by Kyoto University

FOH: farnesol

GGOH: geranylgeraniol

Table 9

Medium composition: YM medium (Difco) + 4 mg/L ergosterol + 0-20 mg/L SQAD

Strain No.	SQAD	Days	Supernatant fraction			Cell fraction		
			(µg/L of culture solution)					
			NE	FOH	GGOH	NE	FOH	GGOH
IFO 0215	0	3	0.0	0.0	0.0	0.0	0.0	0.0
Saccharomyces unisporus	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	3.2	0.0	0.0	0.0	0.0
	0	7	0.0	0.0	0.0	0.0	0.0	0.0
	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	0.0	0.0	0.0	0.0	0.0
IFO 0538	0	3	0.0	0.0	0.0	0.0	0.0	0.0
Saccharomyces cerevisiae	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	0.0	0.0	0.0	8.1	0.0
	0	7	0.0	0.0	0.0	0.0	0.0	0.0
	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	0.0	0.0	0.0	0.0	0.0
IFO 0622	0	3	0.0	3.1	0.0	0.0	1.9	30.4
Candida glabrata	1		0.0	3.5	0.0	0.0	1.4	24.3
	20		0.0	243.5	0.0	0.0	212.0	57.0
	0	7	0.0	0.0	0.0	0.0	0.0	0.0
	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	0.0	0.0	0.0	5.5	40.5
IFO 0717	0	3	0.0	0.0	0.0	0.0	0.0	0.0
Yarrowia lopolytica	1		0.0	1.3	0.0	0.0	0.0	0.0
	20		0.0	39.7	66.5	0.0	39.7	63.5
	0	7	0.0	0.0	0.0	0.0	0.0	0.0
	1		0.0	2.1	0.0	0.0	1.5	0.0
	20		0.0	10.6	0.0	0.0	10.6	0.0
IFO 0948	0	3	0.0	0.0	0.0	0.0	0.0	0.0
Komagataella	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	3.4	2.3	0.0	3.4	1.8
	0	7	0.0	0.0	0.0	0.0	0.0	0.0
	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	0.0	0.0	0.0	0.0	0.0

Table 9 (continued)

(Continuation of Table 9)

IFO 0974	0	3	0.0	0.0	0.0	0.0	0.0	0.0
Kuraishia	1		0.0	0.0	0.0	0.0	0.0	0.0
capsulata	20		0.0	0.0	0.0	0.0	0.0	0.0
	0	7	0.0	0.0	0.0	0.0	0.0	0.0
	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	0.0	0.0	0.0	0.0	0.0
IFO 1472	0	3	0.0	0.0	0.0	0.0	0.0	0.0
Ogataea	1		0.0	0.0	0.0	0.0	0.0	0.0
glucozyma	20		0.0	0.0	18.3	0.0	0.0	17.5
	0	7	0.0	0.0	0.0	0.0	0.0	0.0
	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	0.0	0.0	0.0	0.0	6.8
IFO 1892	0	3	0.0	0.0	0.0	0.0	0.0	8.9
Saccharomyces	1		0.0	0.0	0.0	0.0	0.0	16.7
kluyeri	20		0.0	0.0	0.0	0.0	0.0	38.5
	0	7	0.0	0.0	0.0	0.0	0.0	0.0
	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	0.0	0.0	0.0	0.0	0.0
IFO 1910	0	3	0.0	0.0	0.0	0.0	0.0	0.0
Candida	1		0.0	0.0	0.0	0.0	0.0	0.0
cariosilignicola	20		0.0	0.0	0.0	0.0	0.0	5.5
	0	7	0.0	0.0	0.0	0.0	0.0	0.0
	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	0.0	0.0	0.0	0.0	0.0
IFO 0005	0	3	0.0	0.0	0.0	0.0	0.0	12.0
Candia	1		0.0	0.0	0.0	0.0	0.0	4.3
glabrata	20		0.0	33.8	2.7	0.0	0.0	53.7
	0	7	0.0	0.0	0.0	0.0	20.5	0.0
	1		0.0	0.0	0.0	0.0	0.0	0.0
	20		0.0	0.0	0.0	0.0	0.0	0.0

I: strain purchased from IFO

NE: nerolidol FOH: farnesol GGOH: geranylgeraniol

SQAD: squalene synthesis inhibitor 0: none 1: 1 mg/L 20: 20 mg/L

Table 10

Medium composition: YM medium (Difco) + 5% glucose + 1% soybean oil
+ 4 mg/L ergosterol + 0-20 mg/L SQAD

Strain No.	SQAD	Days	Supernatant fraction			Cell fraction		
			NE	FOH	GGOH	NE	FOH	GGOH
IFO 0215	0	3	16.3	8.2	0.0	0.0	0.0	0.0
Saccharomyces unisporus	1		12.2	5.2	0.0	0.0	0.0	0.0
	20		67.4	68.4	0.0	0.0	16.9	0.0
	0	7	19.6	14.8	0.0	0.0	0.0	0.0
	1		27.3	17.5	0.0	0.0	0.0	0.0
	20		466.6	433.7	21.6	8.6	255.6	0.0
IFO 0538	0	3	0.0	139.3	59.8	0.0	0.0	0.0
Saccharomyces cerevisiae	1		0.0	102.9	46.2	0.0	15.5	0.0
	20		65.9	9087.5	331.6	0.0	1465.9	51.0
	0	7	0.0	426.4	246.7	0.0	38.0	0.0
	1		0.0	319.5	241.0	0.0	188.8	85.6
	20		216.2	34241.4	1568.8	18.4	5812.1	266.2
IFO 0622	0	3	0.0	106.1	112.3	0.0	28.8	33.6
Candida glabrata	1		9.4	149.2	119.7	0.0	9.7	0.0
	20		422.2	12186.9	327.2	0.0	331.6	9.3
	0	7	11.6	378.3	408.5	0.0	43.7	59.2
	1		17.2	530.0	231.5	0.0	133.3	58.5
	20		1256.9	22147.1	862.7	138.0	2750.6	170.5
IFO 0717	0	3	0.0	8.7	0.0	0.0	6.7	0.0
Yarrowia lopolytica	1		2.4	100.1	19.1	0.0	165.3	0.0
	20		19.0	983.3	17.8	0.0	882.1	0.0
	0	7	0.0	95.3	608.0	0.0	0.0	38.4
	1		19.0	405.4	546.8	0.0	0.0	0.0
	20		156.7	6812.9	76.2	0.0	1025.1	41.8
IFO 0948	0	3	0.0	73.5	78.9	0.0	13.8	42.3
Komagataella pastoris	1		0.0	82.2	71.5	0.0	22.9	28.4
	20		17.2	2956.2	132.5	0.0	608.4	80.1
	0	7	0.0	101.6	83.5	0.0	4.3	11.0
	1		0.0	569.8	235.7	0.0	53.4	28.2
	20		34.2	5513.3	360.4	0.0	537.5	84.5

(Continuation of Table 10)

IFO 0974	0	3	0.0	24.8	11.1	0.0	3.3	0.0
Kuraishia	1		0.0	1061.9	46.1	0.0	16.1	7.5
capsulata	20		0.0	2022.7	262.0	0.0	149.2	34.8
	0	7	0.0	167.5	236.3	0.0	3.2	8.5
	1		0.0	713.7	275.7	0.0	24.8	21.2
	20		35.9	8268.5	680.4	0.0	362.1	59.7
IFO 1472	0	3	0.0	34.8	79.8	0.0	7.4	20.4
Ogataea	1		0.0	40.5	86.0	0.0	3.7	9.5
glucozyma	20		0.0	808.8	278.7	0.0	41.1	37.5
	0	7	0.0	63.2	138.8	0.0	0.0	0.0
	1		0.0	93.8	114.7	0.0	0.0	0.0
	20		0.0	1832.0	513.0	0.0	73.7	52.6
IFO 1892	0	3	0.0	70.4	46.1	0.0	3.7	0.0
Saccharomyces	1		0.0	51.4	23.0	0.0	2.3	0.0
kluyeri	20		0.0	62.9	30.7	0.0	16.5	0.0
	0	7	0.0	158.5	71.4	0.0	0.0	0.0
	1		23.5	188.3	101.7	0.0	5.0	0.0
	20		44.1	935.3	126.4	0.0	227.8	27.8
IFO 1910	0	3	0.0	11.0	44.7	0.0	0.0	0.0
Candida	1		0.0	20.9	69.3	0.0	0.0	0.0
cariosilignicola	20		0.0	124.9	127.1	0.0	8.1	19.6
	0	7	0.0	51.7	152.9	0.0	0.0	0.0
	1		0.0	257.7	367.3	0.0	10.3	37.4
	20		0.0	14378.1	2997.2	0.0	845.5	205.0
IFO 0005	0	3	22.9	552.1	496.1	0.0	50.5	75.2
Candia	1		260.0	6784.9	818.5	8.6	462.0	86.5
glabrata	20		2384.0	37513.9	1022.9	423.9	9405.0	306.5
	0	7	77.1	1676.1	1434.6	0.0	41.2	51.2
	1		546.0	11219.5	1377.8	9.2	331.7	77.1
	20		6208.9	68495.6	3228.1	139.2	2682.5	217.6

NE: nerolidol

FOH: farnesol

GGOH: geranylgeraniol

SQAD: squalene synthesis inhibitor

0: none 1: 1 mg/L 20: 20 mg/L

Table 11

Medium composition: YM or KB or KY medium + 1% soybean oil + 6% glucose
+ 4 mg/L ergosterol

Medium	Strain No.	SQUAD	Supernatant fraction (µg/L)		
			NE	FOH	GGOH
YM	IFO 0107	0	0.0	10.8	155.2
	<i>Saccharomycopsis fibuligera</i>	20	0.0	9.7	386.5
KB	K 0876	0	0.0	29.0	0.0
	<i>Pseudomonas</i> sp.	20	0.0	7.8	0.0
YM	IFO 1665	0	0.0	4.7	211.5
	<i>Saccharomycopsis fibuligera</i>	20	0.0	94.5	4214.9
YM	IFO 1744	0	0.0	0.0	155.5
	<i>Saccharomycopsis fibuligera</i>	20	0.0	41.1	3870.1
KB	K 2103	0	0.0	10.9	0.0
	<i>Norcadia asteroides</i>	20	0.0	0.0	0.0
KY	IFO 4570	0	0.0	0.0	36.5
	<i>Mucor javanicus</i>	20	0.0	38.8	343.6
KY	K 4003	0	30.1	511.9	694.7
	<i>Saccharomyces Hafe logos van Laer</i>	20	4980.0	56541.1	3603.4
KY	K 4045	0	148.1	870.4	766.8
	<i>Saccharomyces cerevisiae</i>	20	24606.3	37772.7	2590.6
KY	K 4102	0	17.5	541.1	711.3
	<i>Saccharomyces ellipsoideus</i>	20	18160.8	50245.8	3207.1
KY	K 4103	0	56.4	753.1	1072.8
	<i>Saccharomyces cerevisiae</i>	20	20930.8	53814.6	4589.9
KY	K 4104	0	19.5	569.2	546.0
	<i>Saccharomyces cerevisiae</i>	20	23620.7	54713.2	2654.4
KY	IFO 0565	0	0.0	411.7	535.2
	<i>Saccharomyces cerevisiae</i>	20	839.9	45723.6	2216.6
KY	IFO 0210	0	37.5	685.5	362.8
	<i>Saccharomyces cerevisiae</i>	20	25251.0	48795.6	1627.2
KY	IFO 0346	0	0.0	196.2	278.9
	<i>Schizosaccharomyces pombe</i>	20	757.6	45282.1	1153.6
KY	IFO 1475	0	0.0	236.9	462.7
	<i>Ogataea polymorpha</i>	20	0.0	5643.0	1195.1

Table 11 (continued)

(Continuation of Table 11)

KY JCM 2169	0	0.0	809.8	241.2
Debaryomyces vanriijiae	20	129.5	20359.5	2236.0
var vanriijiae				
KY IFO 0339	0	0.0	164.4	364.3
Saccharomyces ludwigii	20	131.0	28498.6	1483.8
KY IFO 0115	0	0.0	254.9	493.6
Hanseniaspora valbyensis	20	182.6	26807.1	1217.7
Valbyensis				
KY IFO 0648	0	0.0	136.4	433.8
Kluyveromyces lactis	20	348.6	31785.7	3343.8
KY IFO 0005	0	192.8	861.5	909.0
Candida glabrata	20	15504.1	44573.8	2237.1
KY IFO 0762	0	37.0	274.7	384.4
Candida solani	20	1702.8	6574.7	619.1
KY IFO 1527	0	0.0	16.6	24.7
Cryptococcus humicolus	20	0.0	49.6	33.4
KY IFO 1116	0	0.0	199.3	315.7
Wickerhamia fluorescens	20	73.2	12200.1	1181.6

NE: nerolidol

FOH: farnesol

GGOH: geranylgeraniol

SQAD: squalene synthesis inhibitor 0: none 20: 20 mg/L

Treated with phosphatase

Table 12

Medium composition: YM or KB or KY medium + 1% soybean oil + 6% glucose
+ 4 mg/L ergosterol

Medium	Strain No.	Cell fraction (µg/L)			
		SQAD	NE	FOH	GGOH
YM	IFO 0107	0	0.0	8.1	24.6
	<i>Saccharomycopsis fibuligera</i>	20	0.0	4.8	79.9
KB	K 0876	0	0.0	0.0	0.0
	<i>Pseudomonas</i> sp. H21	20	0.0	0.0	0.0
YM	IFO 1665	0	0.0	8.2	21.7
	<i>Saccharomycopsis fibuligera</i>	20	0.0	20.8	228.9
YM	IFO 1744	0	0.0	0.0	42.2
	<i>Saccharomycopsis fibuligera</i>	0	0.0	29.8	819.1
KB	K 2103	0			
	<i>Norcadia asteroides</i>	20			
KY	IFO 4570	0	13.4	22.7	17.5
	<i>Mucor Javanicus</i>	20	0.0	15.6	61.7
KY	K 4003	0	0.0	36.9	52.4
	<i>Saccharomyces Hafe logos</i>	20	291.8	7433.0	710.6
	van Laer				
KY	K 4045	0	0.0	69.3	65.8
	<i>Saccharomyces cerevisiae</i>	20	3022.6	7893.0	534.5
KY	K 4102	0	0.0	36.4	76.3
	<i>Saccharomyces ellipsoideus</i>	20	1350.0	6358.2	396.5
KY	K 4103	0	0.0	591.7	39.4
	<i>Saccharomyces cerevisiae</i>	20	1073.6	5528.9	369.6
KY	K 4104	0	0.0	51.6	79.2
	<i>Saccharomyces cerevisiae</i>	20	2409.9	11464.9	656.2
KY	IFO 0565	0	0.0	40.2	54.7
	<i>Saccharomyces cerevisiae</i>	20	57.3	5071.6	333.5
KY	IFO 0210	0	0.0	119.4	89.6
	<i>Saccharomyces cerevisiae</i>	20	1698.7	4355.2	183.2
KY	IFO 0346	0	0.0	29.7	82.6
	<i>Schizosaccharomyces pombe</i>	20	83.1	4826.5	159.4
KY	IFO 1475	0	0.0	31.4	126.0
	<i>Ogataea polymorpha</i>	20	19.8	1196.1	402.7

(Continuation of Table 12)

KY JCM 2169	0	0.0	67.2	54.3
Debaryomyces vanriijiae	20	23.9	2807.0	492.6
var vanriijiae				
KY IFO 0339	0	0.0	41.6	114.7
Saccharomyces ludwigii	20	0.0	3217.2	199.4
KY IFO 0115	0	0.0	25.2	76.6
Hanseniaspora valbyensis	20	15.1	2823.5	185.8
Valbyensis				
KY IFO 0648	0	0.0	20.9	84.6
Kluyveromyces lactis	20	14.5	1128.6	225.8
KY IFO 0005	0	0.0	34.9	51.7
Candida glabrata	20	1193.0	4710.9	279.6
KY IFO 0762	0	16.2	90.5	126.0
Candida solani	20	231.3	962.5	350.0
KY IFO 1527	0	7.8	16.0	0.0
Cryptococcus humicolus	20	21.2	160.9	51.9
KY IFO 1116	0	0.0	15.0	86.5
Wickerhamia fluorescens	20	32.6	4262.8	500.7

NE: nerolidol

FOH: farnesol

GGOH: geranylgeraniol

SQAD: squalene synthesis inhibitor 0: none 20: 20 mg/L

Treated with phosphatase

Table 13

Medium composition: KB medium + 1% soybean oil + ergosterol

Strain No.	Supernatant fraction ($\mu\text{g/L}$ of culture solution)				Cell fraction		
	SQAD	NE	FOH	GGOH	NE	FOH	GGOH
IFO 3032	0	0.0	11.6	0.0	0.0	0.0	0.0
<i>Bacillus</i>	20	0.0	22.4	0.0	0.0	0.0	0.0
<i>Amylolyticus</i>							
IFO 3030	0	0.0	21.9	0.0	0.0	0.0	0.0
<i>Bacillus pumilus</i>	20	0.0	36.6	0.0	0.0	6.0	0.0
IFO 3762	0	0.0	6.8	0.0	0.0	11.2	0.0
<i>Staphylococcus</i>	20	0.0	121.4	0.0	0.0	292.4	0.0
<i>Epidermidis</i>							
IFO 3067	0	0.0	5.1	0.0	0.0	0.0	0.0
<i>Micrococcus</i>	20	0.0	57.3	0.0	0.0	11.8	0.0
<i>Lutens</i>							
IFO 12146	0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Exiguobacterium</i>	20	0.0	115.7	0.0	0.0	10.4	0.0
<i>Acetyllicum</i>							

NE: nerolidol

FOH: farnesol

GGOH: geranylgeraniol

SQAD: squalene synthesis inhibitor 0: none 20: 20 mg/L

Treated with phosphatase

Table 14

Production of nerolidol (NOH), farnesol (FOH) and geranylgeraniol (GGOH) (mg/L of culture solution)

Strains	No.	Day 3			Day 10			Temp.	Medium
		NOH	FOH	GGOH	NOH	FOH	GGOH		
<i>Alcaligenes faecalis</i>	IFO13111	0.00	0.01	0.11	0.00	0.04	0.09	30	LBO-SSI
<i>Brevibacterium divaricatum</i>	NRRL2311	0.00	0.00	0.02	0.00	0.00	0.00	30	LBO-SSI
<i>Brevibacterium fuscum</i>	IFO12127	0.00	0.02	0.00	0.00	0.00	0.00	30	LBO-SSI
<i>Brevibacterium linens</i>	IFO12171	0.00	0.46	0.00	0.00	0.08	0.00	30	LBO-SSI
<i>Candida catenulata</i>	IFO 0720	0.04	8.10	0.34	0.04	8.61	0.47	30	YMO-SSI
<i>Candida fragicola</i>	IFO 1574	0.03	4.91	0.76	0.04	8.95	1.31	30	YMO-SSI
<i>Candida krusei</i>	IFO 0013	0.04	6.99	0.29	0.06	13.65	0.86	30	YMO-SSI
<i>Candida lambica</i>	IFO 1146	0.02	4.53	0.49	0.04	0.59	1.24	30	YMO-SSI
<i>Candida maltosa</i>	IFO 1977	0.00	6.74	0.19	0.08	0.03	0.58	30	YMO-SSI
<i>Candida mycoderma</i>	IFO 0164	0.02	5.45	0.20	0.03	4.69	0.17	30	YMO-SSI
<i>Candida parapsilosis</i>	IFO 0708	0.00	1.76	0.17	0.01	5.13	0.25	30	YMO-SSI
<i>Candida rugosa</i>	IFO 0591	0.00	0.90	0.08	0.00	4.20	0.19	30	YMO-SSI
<i>Candida succiphila</i>	IFO 1911	0.00	2.44	0.25	0.00	0.00	0.00	30	YMO-SSI
<i>Candida tropicalis</i>	IFO 0006	0.00	0.00	0.00	0.17	9.04	0.00	30	YMO-SSI
<i>Candida zeylanoides</i>	IFO 0719	0.00	1.43	0.29	0.00	7.38	1.24	30	YMO-SSI
<i>Cryptococcus albidus</i>	IFO 0881	0.00	0.15	0.03	0.02	2.41	0.45	30	YMO-SSI
<i>Cryptococcus glutinis</i>	IFO 1125	0.04	6.64	1.48	0.35	3.70	3.29	24	YMO-SSI
<i>Dipodascus ovetensis</i>	IFO 1201	0.00	4.23	0.14	0.04	8.68	0.95	30	YMO-SSI
<i>Haloferax volcanii</i>	IFO 14742	2.12	39.11	1.04	4.14	57.73	2.49	30	HVO-SSI
<i>Hanseniaspora valbyensis</i>	IFO 1758	0.00	0.33	0.04	0.04	2.40	0.12	30	YMO-SSI
<i>Issatchenkia orientalis</i>	IFO 1279	0.00	2.22	0.15	0.03	7.68	0.52	30	YMO-SSI
<i>Kloeckera africana</i>	IFO 0868	1.09	10.90	0.81	1.10	6.29	0.17	30	YMO-SSI
<i>Kloeckera apiculata</i>	IFO 0151	0.00	0.05	0.02	1.04	10.73	0.86	30	YMO-SSI
<i>Kluyveromyces marxianus</i>	IFO 0617	0.09	14.48	0.87	0.13	16.29	1.71	30	YMO-SSI
<i>Kuraishia capsulata</i>	IFO 0974	0.00	0.91	0.17	0.00	3.25	0.42	30	YMO-SSI
<i>Mortierella ramanniana</i>	ATCC 24786	0.00	0.00	0.00	0.00	0.76	0.13	24	YMO-SSI
<i>Nakazawaea hostii</i>	IFO 0980	0.01	1.06	0.18	0.02	5.85	0.38	30	YMO-SSI
<i>Pichia capsulata</i>	IFO 0984	0.00	0.63	0.04	0.04	4.17	0.11	30	YMO-SSI
<i>Pichia henricii</i>	IFO 1477	0.00	3.20	0.12	0.00	3.24	0.00	30	YMO-SSI
<i>Pichia hostii</i>	IFO 0980	0.04	6.22	0.22	0.04	2.79	0.65	30	YMO-SSI
<i>Pichia naganishii</i>	IFO 1670	0.00	2.14	0.22	0.02	9.28	0.96	30	YMO-SSI
<i>Pichia rhodanensis</i>	IFO 1272	0.03	3.34	0.91	0.46	26.57	10.29	30	YMO-SSI
<i>Pichia saitoi</i>	IAM 4945	0.34	10.78	0.51	0.28	24.31	1.38	30	YMO-SSI
<i>Rhodospiridium toruloides</i>	IFO 8766	0.88	6.59	2.47	0.72	2.47	2.52	24	YMO-SSI
<i>Rhodotorula aurantiaca</i>	IFO 0951	0.01	3.14	0.18	0.03	6.11	0.50	30	YMO-SSI
<i>Rhodotorula rubra</i>	IFO 0870	0.03	1.62	1.02	0.16	2.32	1.61	30	YMO-SSI
<i>Saccharomyces fibuligera</i>	IFO 0105	0.00	0.06	1.68	0.00	5.71	4.79	30	YMO-SSI
<i>Saccharomyces lipolytica</i>	IFO 1209	0.05	9.48	0.16	0.21	16.46	0.83	30	YMO-SSI
<i>Schizosaccharomyces octosporus</i>	IAM4842	0.00	1.24	0.03	0.00	1.79	0.08	30	YMO-SSI
<i>Staphylococcus aureus</i>	IFO3060	0.00	0.06	0.00	0.00	0.05	0.00	30	YMO-SSI
<i>Torulaspora delbrueckii</i>	IFO 1626	0.04	2.33	0.15	0.06	5.50	0.36	30	YMO-SSI
<i>Trichosporon cutaneum</i>	IFO 1198	0.00	10.23	0.69	0.00	0.14	0.09	30	YMO-SSI
<i>Tsukamurella paucumetabolum</i>	IFO12160	0.00	0.07	0.00	0.00	0.06	0.00	30	YMO-SSI
<i>Yamadazyma farinosa</i>	IFO 0193	0.00	1.27	0.18	0.00	2.36	0.82	30	YMO-SSI
<i>Yarrowia lipolytica</i>	IFO 0746	0.06	9.66	0.15	0.16	13.41	0.36	24	YMO-SSI
<i>Zygosaccharomyces japonicus</i>	IFO 0595	0.05	0.77	0.05	0.10	2.17	0.15	30	YMO-SSI

Table 14 (continued)

Production of nerolidol (NOH), farnesol (FOH) and geranylgeraniol (GGOH) (mg/L of culture solution)

Strains	IFO No.	Day 3			Day 10			Temp. (°C)	Medium
		NOH	FOH	GGOH	NOH	FOH	GGOH		
<i>Ambrosiozyma ambrosiae</i>	10835	0.0	0.1	1.5	0.0	0.0	0.7	24	YPDO-SSI
<i>Ambrosiozyma monospora</i>	10751	0.0	1.0	0.3	0.0	4.8	1.4	24	YMO-SSI
<i>Ambrosiozyma philentoma</i>	1847	0.0	0.9	0.2	0.0	16.8	0.8	24	YMO-SSI
<i>Ambrosiozyma platypodis</i>	10752	0.0	1.7	0.1	0.0	48.6	1.4	24	YMO-SSI
<i>Bensingtonia intermedia</i>	10178	0.0	1.5	0.7	0.0	2.9	5.2	24	YMO-SSI
<i>Botryozyma nematodophila</i>	10830	0.0	2.5	0.3	0.0	5.6	2.8	24	YPDO-SSI
<i>Brettanomyces anomalus</i>	0627	0.0	18.0	0.4	0.6	16.7	0.0	24	YMO-SSI
<i>Brettanomyces bruxellensis</i>	0797	0.0	4.7	0.5	0.0	8.2	0.0	24	YMO-SSI
<i>Brettanomyces custersianus</i>	10735	0.0	0.1	1.4	0.0	20.0	0.6	24	YMO-SSI
<i>Bullera crocea</i>	10113	0.0	7.4	0.5	0.0	16.1	0.5	17	YMO-SSI
<i>Bullera sinensis</i>	10756	0.1	0.3	1.0	0.1	1.7	2.3	24	YMO-SSI
<i>Citeromyces matritensis</i>	0651	0.1	2.0	0.4	0.0	0.7	0.0	24	YMO-SSI
<i>Clavispora lusitanae</i>	10059	0.0	1.0	0.3	0.1	9.2	9.1	24	YMO-SSI
<i>Cystoflbasidium infirmominium</i>	1057	5.7	14.9	2.6	10.8	48.4	3.6	24	YMO-SSI
<i>Debaryomyces occidentalis</i>	1842	0.0	0.7	0.2	0.0	0.4	4.1	24	YMO-SSI
<i>Dekkera bruxellensis</i>	1590	0.0	3.7	0.2	0.0	15.7	0.0	24	YMO-SSI
<i>Dipodascus armillariae</i>	10804	0.0	4.2	0.1	0.0	3.3	0.2	24	YMO-SSI
<i>Dipodascus tetrasperma</i>	10810	0.0	1.7	0.8	0.0	9.8	2.5	24	YMO-SSI
<i>Eremascus albus</i>	10811	0.0	0.0	4.8	0.0	0.0	3.6	24	YMO-SSI
<i>Eremascus fertilis</i>	0691	0.0	0.0	0.0	0.0	0.4	0.0	24	YMO-SSI
<i>Eremothecium gossypii</i>	1355	0.0	0.8	0.0	0.0	4.4	0.9	24	YMO-SSI
<i>Erythrobasidium hasegawianum</i>	1058	0.0	0.5	1.0	0.0	0.0	6.8	24	YMO-SSI
<i>Hanseniaspora guilliermondii</i>	1411	0.0	1.4	0.1	0.0	1.3	0.0	24	YMO-SSI
<i>Hanseniaspora uvarum</i>	10833	0.1	15.3	2.9	0.4	11.1	0.8	24	YPDO-SSI
<i>Kloeckeraspora vineae</i>	1415	0.4	3.4	0.3	0.7	1.2	0.0	24	YMO-SSI
<i>Kockovaella imperatae</i>	10522	0.0	3.2	3.5	0.0	19.5	6.2	24	YMO-SSI
<i>Kodamea ohmeri</i>	0202	0.0	7.7	1.6	0.1	13.7	4.7	24	YMO-SSI
<i>Kurtzmanomyces nectairei</i>	10118	0.0	0.1	0.1	0.0	0.0	0.0	24	YMO-SSI
<i>Leucosporidium scottii</i>	1924	0.2	32.8	1.3	0.7	5.2	0.0	24	YMO-SSI
<i>Lodderomyces elongisporus</i>	1676	0.1	14.8	2.0	0.1	15.7	0.0	24	YMO-SSI
<i>Malassezia furfur</i>	0656	0.0	4.3	0.1	0.0	6.9	0.1	30	YMOO-SSI
<i>Metschnikowia hawaiiensis</i>	10791	0.0	0.0	0.3	0.0	0.0	0.2	24	YPDO-SSI
<i>Metschnikowia krissi</i>	1677	0.0	1.3	0.1	0.0	21.0	0.0	24	YMO-SSI
<i>Metschnikowia lunata</i>	1605	0.0	5.1	1.0	0.3	31.9	5.9	24	YMO-SSI
<i>Metschnikowia pulcherrima</i>	0863	0.0	10.5	0.2	0.1	15.4	0.3	24	YMO-SSI
<i>Mrakia frigida</i>	1926	0.5	25.3	0.3	0.3	11.3	0.1	12	YMO-SSI

Table 14 (continued)

Production of nerolidol (NOH), farnesol (FOH) and geranylgeraniol (GGOH) (mg/L of culture solution)

Strains	IFO No.	Day 3			Day 10			Temp. (°C)	Medium
		NOH	FOH	GGOH	NOH	FOH	GGOH		
<i>Myxozyma lipomycoideis</i>	10351	0.7	23.3	5.4	1.3	35	1.1	24	YMO-SSI
<i>Nadsonia commutata</i>	10029	0.0	0.1	0.0	0.0	0.3	0.0	17	YMO-SSI
<i>Pachysolen tannophilus</i>	1007	0.0	0.1	0.1	0.0	1.9	1.4	24	YMO-SSI
<i>Pichia burtonii</i>	10837	0.0	3.0	1.1	0.0	7.5	1.7	24	YMO-SSI
<i>Pichia misumalensis</i>	10221	0.3	20.8	1.8	1.0	14.5	2.0	24	YMO-SSI
<i>Pichia ofunensis</i>	10709	0.0	0.1	0.1	0.0	0.0	0.0	24	YMO-SSI
<i>Pichia pipieri</i>	1290	0.5	5.1	0.6	0.5	6.4	0.5	24	YMO-SSI
<i>Saccharomyces transvaalensis</i>	1625	0.1	0.0	0.0	0.0	0.0	0.0	30	YMO-SSI
<i>Saccharomyces sinensis</i>	10111	0.1	0.4	0.0	0.6	0.8	0.1	30	YMO-SSI
<i>Saccharomycopsis fibuligera</i>	10829	0.0	0.0	4.1	0.0	0.0	2.8	24	YPDO-SSI
<i>Saccharomycopsis javaensis</i>	1848	0.0	0.0	0.0	0.0	0.0	0.6	24	YMO-SSI
<i>Saccharomycopsis schoenii</i>	10683	0.1	5.3	0.4	0.5	28.3	2.3	24	YMO-SSI
<i>Saccharomycopsis synnaedendra</i>	1604	0.0	2.8	1.3	0.0	1.2	0.0	24	YMO-SSI
<i>Saccharomycopsis vini</i>	1748	0.0	3.9	0.4	0.0	23.2	6.4	24	YMO-SSI
<i>Saturnispora zarusensis</i>	1384	0.0	0.2	0.1	0.0	3.0	1.3	24	YMO-SSI
<i>Schizoblastosporion kobayashii</i>	1644	0.0	4.0	0.9	0.0	2.8	4.7	24	YMO-SSI
<i>Schizoblastosporion starkeyi-henrici</i>	10842	0.0	0.9	0.2	0.0	1.1	0.8	24	YPDO-SSI
<i>Sporopachydermia cereana</i>	10013	0.0	0.6	0.2	0.2	0.1	1.2	24	YMO-SSI
<i>Stephanosacus ciferrii</i>	1854	0.0	0.9	0.1	0.0	3.3	0.0	24	YMO-SSI
<i>Sterigmatomyces elviae</i>	1843	0.0	4.5	0.5	0.1	10.5	1.8	24	YMO-SSI
<i>Sterigmatomyces halophilus</i>	1488	0.0	0.0	0.0	0.8	0.3	0.0	24	YMO-SSI
<i>Sterigmatosporidium polymorphum</i>	10121	0.0	2.4	0.1	0.0	15.7	1.3	24	YMO-SSI
<i>Synpodiumyces parvus</i>	10132	0.0	3.7	0.1	0.0	3.0	0.0	17	YMO-SSI
<i>Synpodiumyces paphiopedili</i>	10750	0.0	1.3	1.0	0.0	0.8	1.0	24	YMO-SSI
<i>Trichosporon brassicae</i>	1584	0.0	13.0	0.7	0.0	13.2	0.0	24	YMO-SSI
<i>Trichosporon pullulans</i>	1232	0.2	10.9	0.2	0.3	30.5	1.1	17	YMO-SSI
<i>Trigonopsis variabilis</i>	0755	0.0	0.0	0.0	0.0	0.1	0.2	24	YMO-SSI
<i>Tsuchiyaea wingfieldii</i>	10204	0.0	15.3	0.7	0.0	17.5	1.4	24	YMO-SSI
<i>Wickerhamella domercqiae</i>	1857	0.0	1.7	0.0	0.0	5.2	0.0	24	YMO-SSI
<i>Xanthophyllomyces dendrorhous</i>	10130	0.1	30.0	0.8	0.5	33.8	2.8	24	YMO-SSI
<i>Zygozma oligophaga</i>	10360	0.1	6.4	5.3	0.8	24.3	5.6	24	YMO-SSI

Table 14 (continued)

Production of nerolidol (NOH), farnesol (FOH) and geranylgeraniol (GGOH) (mg/L of culture solution)

Strains	No.	Day 3			Day 9			Temp. (°C)	Medium
		NOH	FOH	GGOH	NOH	FOH	GGOH		
<i>Aciculoconidium aculeatum</i>	IFO 10124	0.0	21.3	1.4	0.0	26.4	2.3	24	YMO-SSI
<i>Bullera pseudoalba</i>	IFO 10179	0.0	11.0	2.0	0.0	40.7	15.0	24	YMO-SSI
<i>Candida albicans</i>	IFO 1050	0.2	108.8	3.5	0.8	32.9	4.7	30	YMO-SSI
<i>Candida glabrata</i>	IFO 0741	0.3	19.6	0.6	3.2	70.1	4.2	30	YMO-SSI
<i>Candida guilliermondii</i>	IFO 0586	0.0	3.9	0.8	0.0	4.2	1.1	30	YMO-SSI
<i>Candida intermedia</i>	IFO 0751	0.0	56.2	2.5	0.1	87.0	6.2	30	YMO-SSI
<i>Candida kefyr</i>	IFO 0706	0.3	28.2	2.0	0.7	15.8	2.9	30	YMO-SSI
<i>Candida krusei</i>	IFO 0941	0.5	37.9	4.0	3.7	7.8	8.0	30	YMO-SSI
<i>Candida tenuis</i>	IFO 0716	0.0	2.2	0.2	0.0	31.2	2.2	30	YMO-SSI
<i>Candida utilis</i>	IFO 0619	0.2	42.2	5.5	0.8	52.5	11.1	30	YMO-SSI
<i>Cryptococcus humicola</i>	IFO 0753	0.2	6.3	2.0	0.0	0.3	3.3	30	YMO-SSI
<i>Cryptococcus terreus</i>	IFO 0727	0.0	1.2	0.1	0.2	1.9	0.3	30	YMO-SSI
<i>Debaryomyces castellii</i>	IFO 1359	0.0	11.4	1.1	0.0	26.8	4.6	30	YMO-SSI
<i>Fellomyces penicillatus</i>	IFO 10119	0.0	2.9	0.3	0.1	45.7	4.4	24	YMO-SSI
<i>Filobasidium capsuligenum</i>	IFO 1185	0.0	51.0	1.1	0.2	106.6	3.6	24	YMO-SSI
<i>Filobasidium uniguttulatum</i>	IFO 0699	0.0	28.7	1.3	0.4	85.4	8.9	24	YMO-SSI
<i>Kloeckera cortici</i>	IFO 0633	0.4	42.8	2.3	1.2	62.1	8.2	30	YMO-SSI
<i>Holtermannia corniformis</i>	IFO 10742	0.0	25.4	2.8	1.1	50.7	8.4	24	YMO-SSI
<i>Kluyveromyces marxianus</i>	IFO 0617	0.0	16.6	0.8	0.4	35.1	5.0	30	YMO-SSI
<i>Phaffia rhodozyma</i>	ATCC 66270	0.0	2.2	0.1	0.5	108.7	5.8	24	YMO-SSI
<i>Pichia anomala</i>	IFO 0146	0.2	34.8	2.6	0.2	7.4	4.3	30	YMO-SSI
<i>Pichia fabianii</i>	IFO 1254	0.0	14.3	1.5	0.2	0.1	4.2	30	YMO-SSI
<i>Pichia farinosa</i>	IFO 1003	0.0	3.2	0.6	0.0	11.1	1.8	30	YMO-SSI
<i>Pichia jadinii</i>	IFO 0987	0.0	23.1	2.0	0.1	24.6	8.3	30	YMO-SSI
<i>Pichia polymorpha</i>	IFO 0195	0.3	21.8	3.2	0.4	0.6	5.2	30	YMO-SSI
<i>Pichia silvicola</i>	IFO 0807	0.2	10.6	1.6	0.8	29.0	4.2	30	YMO-SSI
<i>Rhodotorula glutinis</i>	IFO 0695	0.0	3.8	0.2	0.0	3.4	0.3	30	YMO-SSI
<i>Rhodotorula minuta</i>	IFO 0715	0.3	6.6	12.0	3.4	5.0	0.7	30	YMO-SSI
<i>Rhodotorula rubra</i>	IFO 0870	0.3	5.5	10.8	3.5	4.4	26.4	30	YMO-SSI
<i>Saccharomyces cerevisiae</i>	IFO 0258	0.0	22.3	0.6	0.4	77.5	1.9	30	YMO-SSI
<i>Saccharomyces cerevisiae</i>	IFO 2347	0.0	18.8	0.7	0.1	36.5	1.4	30	YMO-SSI
<i>Saccharomyces ludwigii</i>	IFO 10036	0.0	3.3	0.2	0.1	15.5	0.4	24	YMO-SSI
<i>Saccharomycopsis fermentans</i>	IFO 10772	0.1	41.4	1.9	0.3	37.9	3.1	24	YMO-SSI
<i>Sporidiobolus salmonicolar</i>	IFO 1035	0.1	7.9	1.1	0.1	42.3	6.4	30	YMO-SSI
<i>Sporobolomyces salmonicolar</i>	IFO 0374	0.1	28.8	3.4	0.5	35.7	14.4	30	YMO-SSI
<i>Trichosporiella flavicans</i>	IFO 1573	0.0	0.0	0.0	0.2	31.5	3.0	24	YMO-SSI
<i>Trichosporon penicillatum</i>	JCM 2171	0.0	1.7	0.6	0.1	1.7	0.0	30	YMO-SSI
<i>Williopsis californica</i>	IFO 0800	10.1	95.7	4.7	10.5	90.1	5.2	24	YMO-SSI
<i>Williopsis saturnus</i>	IFO 0895	0.5	59.1	9.0	1.6	69.2	13.1	30	YMO-SSI
<i>Yamadazyma farinosa</i>	IFO 0459	0.0	6.2	0.8	0.0	20.8	2.2	30	YMO-SSI
<i>Zygoascus hellenicus</i>	IFO 10184	0.0	3.9	0.1	0.0	32.4	2.7	24	YMO-SSI